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IN THE CLAIMS

Please amend the claims as noted herein, no new matter is added. For the convenience of the Office, Applicant is including the complete set of claims.

- 1.(Amended) An improved packaging for establishing optimum atmospheric conditions for respiring produce, comprising:
a polymeric material;
a set of microperforations on said polymeric material, wherein said set of microperforations control said optimum atmospheric conditions within specified O₂ and CO₂ concentrations for said respiring produce, and wherein said set of microperforations are placed in a registered target area on said polymeric material.
2. The improved packaging material according to claim 1, wherein said polymeric material is selected from the group consisting of polyethylene, polypropylene, polyester, nylon, polystyrene, styrene butadiene, cellophane, and polyvinyl chloride, in monolayers, coextrusions, or laminates.
3. The improved packaging material according to claim 1, wherein said polymeric material is heat-sealable.
4. The improved packaging material according to claim 1, wherein said polymeric material has a thickness in the range of 0.4 to 8 mil.
5. The improved packaging material according to claim 1, wherein said polymeric material provides a total O₂ Flux ranging from 150 cc/day-atm to 5,000,000 cc/day-atm.
6. The improved packaging material according to claim 1, wherein said polymeric material provides a total O₂ Flux ranging from 200 cc/day-atm to 1,500,000 cc/day-atm.
7. The improved packaging material according to claim 1, wherein said polymeric material forms a bag.

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8. The improved packaging material according to claim 1, wherein said polymeric material is a heat sealable lidding film.
9. The improved packaging material according to claim 1, wherein said polymeric material is formed into a semi-rigid container with a thickness greater than 8 mil.
10. (Twice Amended) The improved packaging material according to claim 7, wherein said bag has an upper portion about an opening of said bag, and wherein said registered target area is a small identifiable area in an upper one-quarter of said upper portion of said bag.
11. (Twice Amended) The improved packaging material according to claim 7, wherein said bag has an upper portion about an opening of said bag, and wherein said registered target area is a small identifiable area in an upper one-third of said upper portion of said bag.
12. (Amended) The improved packaging material according to claim 1, wherein said registered target area is located in an area that prevents occlusion of the microperforations by product, labels or other packages.
13. The improved packaging material according to claim 1, wherein each of said microperforations has an average diameter between 110 and 400 microns.
14. The improved packaging material according to claim 1, wherein said polymeric material has a CO₂ transmission rate that is 2.5 to 5.0 times greater than the O₂ transmission rate.
21. The improved packaging material according to claim 1, wherein each of said microperforations has an average diameter in the range between 120-160 microns.